Nueces Estuary Advisory Council (NEAC) Meeting Monday June 16, 2014 1:30 p.m. Harte Research Institute Texas A&M University – Corpus Christi Corpus Christi, TX 78412

Minutes

Members Present: Chris Loft, Chair; Ray Allen; Jace Tunnell; Ruben Solis; Paul Carangelo; Rocky Freund; Con Mims; Brent Clayton; Carola Serrato; James Tolan; John Adams; Tom Ballou

Call to Order

Chairman Chris Loft called the meeting to order. The NEAC members and alternates present introduced themselves.

Public Comment

No public comments were made at this time.

Approval of October 22, 2013 Meeting Minutes

Members unanimously approved the October 22, 2013 minutes.

Update on Smart Inflow Management – Cory Shockley

Cory Shockley, HDR, provided an overview of the modeling analyses performed to evaluate SMART inflow management of the safe yield of the water supply in Lake Corpus Christi and Choke Canyon Reservoir as well as freshwater inflows to the Nueces River Delta and Bay. Key findings presented show that multiple triggers and/or target combinations achieve similar safe yield of the system, higher spring freshwater inflows targets are achievable without reducing safe yield, and that seasonal targets provide more opportunity for pass-throughs than monthly targets. Mr. Shockley further indicated that overall there are opportunities to utilize SMART inflow management without negatively impacting safe yield and that in the short-term SMART inflow management might better support the needs of the Nueces Delta during critical drought periods. The final report is due to the City of Corpus Christi by August 31, 2014. Members inquired as to what affects short-term increases or decreases in freshwater inflows might have on a species' fecundity and why model runs only proceeded from 1934 through the year 2003. Mr. Shockley indicated that it is possible freshwater inflows might affect the reproductive capacity of a specific species and that the modeled runs utilized a hydrologic dataset from 1934 through 2004 to determine current safe yield because the model had not been updated and that the current drought is considered on par with the drought of 1996. He also stated that at some point the models could be updated to include more recent years.

Status of the City of Corpus Christi's Water Supplies/Resources and Update on Banked Water – Brent Clayton

Brent Clayton updated members concerning the status of banked water in the Lake Corpus Christi and Choke Canyon Reservoir system. He explained that banking was halted in April 2013. At that time, the total water banked equaled 22,743 acre-feet. It was determined that the remaining banked water would be passed through Rincon Bayou on a per month basis at a volume of 2,000 acre-feet till no balance remained except when lake levels dip below 40%. To date the current balance is 8,172 acre-feet.

Mr. Clayton also provided an overview concerning the current status of the City of Corpus Christi's water resources and water supply. He reported that at present the combined levels for Lake Corpus Christi and Choke Canyon Reservoir are 43.1% full with a total of 410,872 acre-feet of water. He indicated that the City is currently in Stage 1 of their Drought Contingency Plan and outlined the City's future conservation initiatives. Furthermore, Mr. Clayton announced the beginning of Phase II of the Mary Rhodes Pipeline Project as well as site selection and scoping of a desalination pilot project currently underway. Additionally, he informed members that the City has selected a firm to develop a Water Supply Strategic Sustainability Plan for which the scope of work is currently being developed. Discussion followed with members inquiring as to whether return flow credits in the Agreed Order were specific to the Allison Waste Water Treatment Plant and how any changes would impact the Agreed Order. Mr. Clayton explained that compliance with the Agreed Order is written into any new contracts with the City. Members also questioned if the drought stages would be modified if once per week watering was a year-round measure as well as a measure in stage 2 and whether conservation outreach efforts were focusing more on new development versus existing landscapes and structures. Mr. Clayton mentioned that while both stage 1 and 2 would restrict watering to once per week, stage 2 restrictions would apply to wholesale customers. Furthermore, he stated that the City is looking for funding opportunities to develop incentive programs aimed at retrofitting existing landscapes and structures.

Presentations from Selected Contractors for Workplan Priority Projects: Chairman Chris Loft introduced the top-ranked contractors selected for workplan funding by the Nueces BBASC, and Ruben Solis, TWDB, stated that the contracts are scheduled to be finalized by the end of August. Each contractor provided a short presentation over their proposed project.

- a) Nueces Delta Hydrodynamic Model Dr. Ben Hodges, University of Texas at Austin, provided an overview of a proposed project to evaluate temporal and spatial changes in salinity distribution from Calallen Dam to Nueces Bay. The proposed work will incorporate modeling of the Nueces Bay and Nueces Delta as well as various freshwater pumping scenarios.
- b) Nueces Landform Modifications James Dodson, Naismith Engineering, Inc., presented a project that assesses how existing freshwater supplies can be potentially enhanced through landform modification such as altering structures or riverbed bathymetry. He further indicated that scenarios developed will be used as inputs into Dr. Hodges' hydrodynamic model.
- c) Nueces Monthly Inflow Evaluation Cory Shockley, HDR Inc., introduced a proposed project on a re-examining the 2001 Agreed Order monthly targets and

safe yield versus current demand evaluations. The goals of the project are to determine if a "shift" has occurred in the inflow regime to Nueces Bay and the CCR/LCC system as well as determine the potential impacts such a change might have on safe yield and Bay inflows.

d) Nueces Nutrient Changes Over Time – Paula Lemonds, HDR Inc., described a proposed project to develop pre- and post- nutrient budgets for the Nueces Watershed. The aim of the project consists of portioning out natural nutrient loads versus anthropogenic loadings and developing annual loads for predevelopment and present conditions.

Other items identified by NEAC members

NEAC members, John Adams and Tom Ballou, expressed their concerns regarding two pending industrial desalination projects (M&G and Voestalpine) effecting bay salinities. Discussion followed concerning whether it is within the NEAC's purview to be involved in the permitting process with regards to these and other desalination project applications in Nueces Bay. Chairman Loft informed members that they could as individuals provide comments or protest applications through the appropriate channels at TCEQ. Member Con Mims indicated that the NEAC's roll is as an advisory group to Texas Commission on Environmental Quality (TCEQ) on the agreed order and providing comments from the NEAC on water right or water quality applications would be outside the group's jurisdiction. Members then suggested that the NEAC meet on quarterly basis and invite applicants to present information on their projects for discussion by members and if warranted, members could then provide comments to TCEQ on an individual basis. Chairman Loft indicated he would discuss this issue with TCEQ legal staff.

Next Meeting

The next meeting of the NEAC is tentatively scheduled for Monday, October 20th, 2014 at 1:30 p.m.

Public Comment

No public comments at this time.

Meeting Adjourned